

## Issues Summary

Moving forward, the county must consider these land use-related issues and problems:

- Industrial land use
- Natural land use balance
- Land use resiliency
- Healthy communities

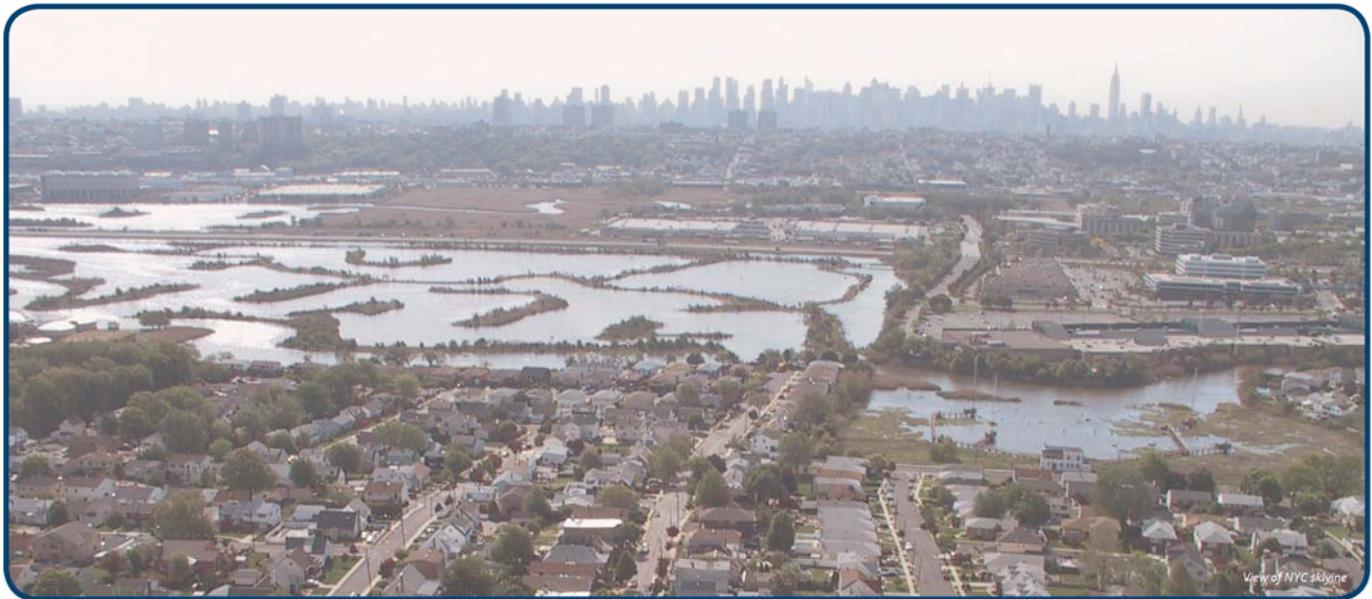


Jersey City, NJ, JFK Airport, Journal Square looking north

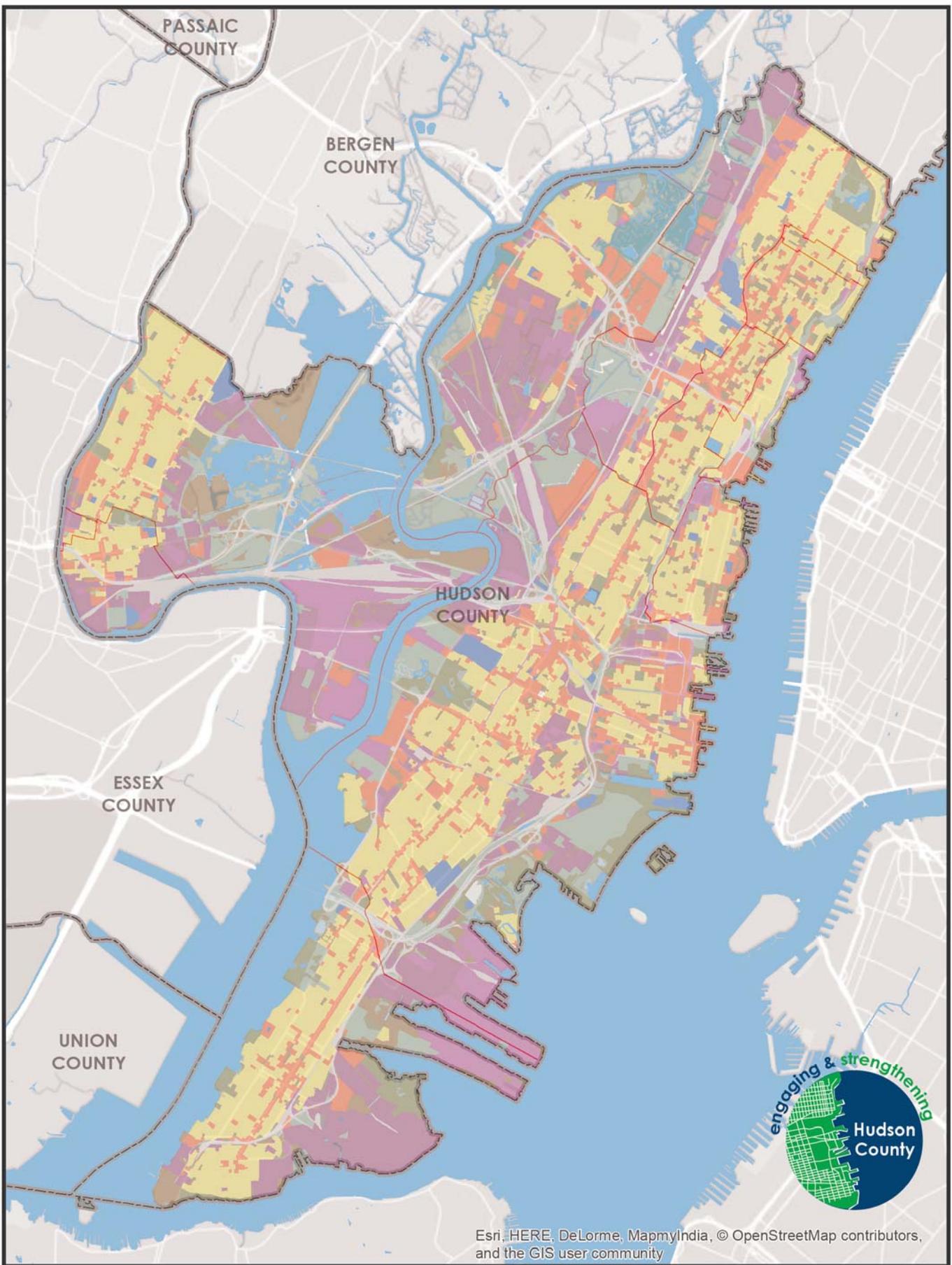
## Introduction

The purpose of the Land Use Element is to provide a comprehensive approach to the variety of issues facing Hudson County from both a local and regional perspective. While Hudson County contains no land use powers respective to zoning and site plan approvals, it is important for the county to promote a variety of land use options throughout the county that support economic activity, recreational and educational opportunities, and protects human health and the natural environment.

The element examines previous land use goals and objectives, issues identified in the 2002 Master Plan and the 2008 Re-examination Report, and analyzes whether those issues have been reduced or increased. The Land Use Element also establishes a new set of goals and objectives based on both previously identified and new land use issues. Finally, this element includes recommendations to support responsible land use decision-making by municipalities in the county.



View of NYC skyline

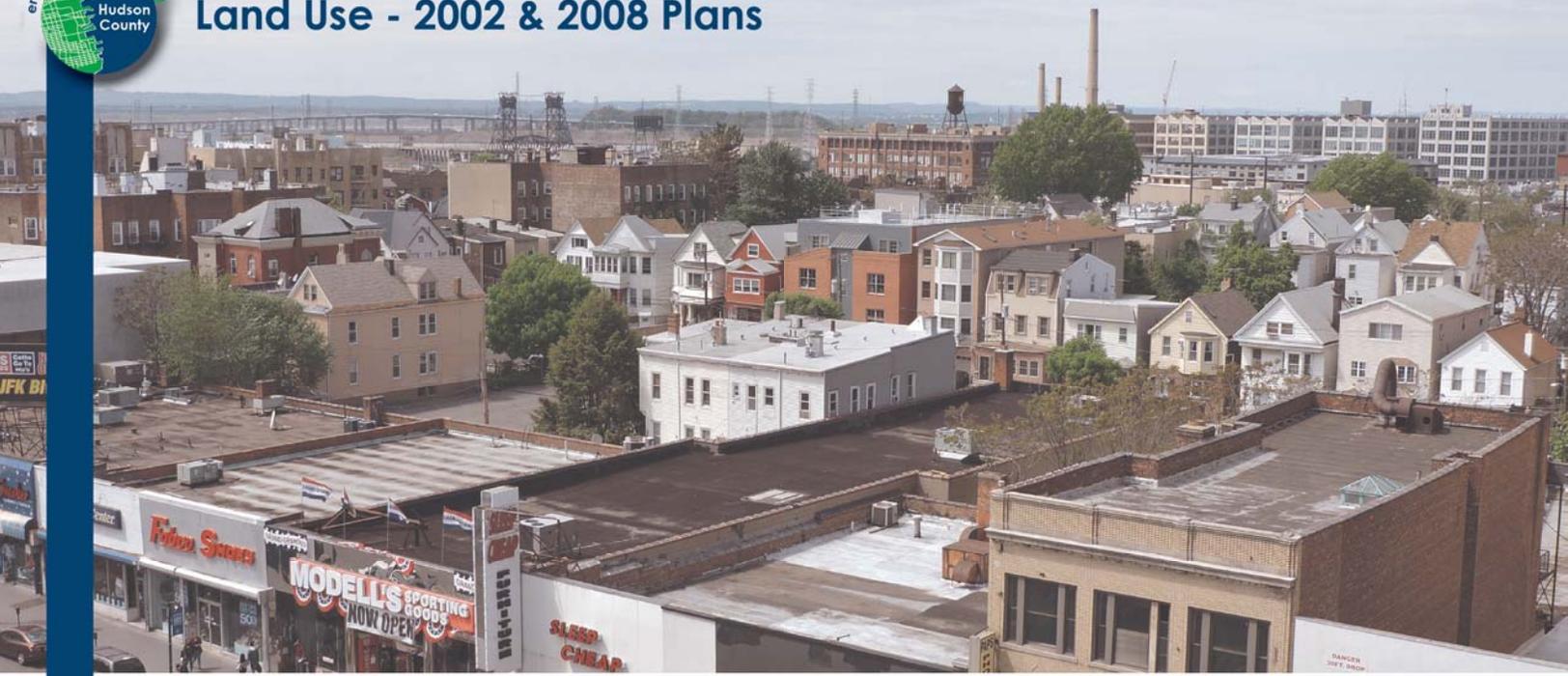


### Existing Land Use (2012 - Updated 2015)

0 0.5 1 2 Miles



- |             |                                  |                                     |
|-------------|----------------------------------|-------------------------------------|
| Residential | Industrial                       | Public-Institutional Use/Facilities |
| Commercial  | Open Space/Marsh<br>Wooded Areas | Recreation                          |
|             |                                  | Mixed Urban-<br>Developed Land      |



The 2008 Re-examination Report published the following goals and objectives for the Land Use Element.

### 2008 Goals and Objectives

#### 2008 Goals

1. To maintain and improve areas that provide centers for employment, education, entertainment facilities, services, shopping and other resources.
2. To encourage existing manufacturing and industrial uses to remain, modernize and expand and to encourage new manufacturing and industrial uses to locate in the County.
3. To provide for a full range of retail businesses and personal services in suitable locations to serve the needs of the County.
4. To assist in the implementation of the development and redevelopment of the waterfronts of the Hudson, Passaic and Hackensack Rivers.
5. To integrate land use planning with transportation planning and capacities, including all modes, but particularly pedestrian and bicycle and to promote development intensities that will support mass transit.
6. To promote compact and mixed-use development patterns.
7. To promote the development of walkable communities fully linked and integrated with the pedestrian transportation grid.
8. To encourage redevelopment in areas in need of rehabilitation.
9. To encourage remediation and reuse of environmentally contaminated sites.
10. To minimize the negative effects of development and redevelopment on the natural and built environments.
11. To discourage development on environmentally sensitive sites.

## 2008 Objectives

1. Encourage development and redevelopment that utilizes alternative transportation measures for bicycle, pedestrian and transit friendly design practices and capitalizes on existing and planned transportation improvements.
  2. Consider the established character of existing neighborhoods as a factor in the evaluation of new development and redevelopment projects.
  3. Provide assistance to municipalities in the preparation of urban design standards for infill development to create “urban neighborhoods of place” that reflect the character of existing neighborhoods.
  4. Encourage municipalities to adopt performance controls for nuisance factors that occur when incompatible uses are located in close proximity.
  5. Encourage municipalities to consider design standards for new construction that create a sense of unity and order in the design of buildings, streets, sidewalks, shade trees, signage and other structures.
  6. Encourage municipalities to create separate standards for unified streetscape improvements that improve pedestrian circulation in downtown areas as well as enhanced access to jobs.
  7. Encourage developments to utilize alternative transportation measures that decrease traffic congestion and improve level-of service.
  8. Reduce the negative effects of stormwater run-off including non-point source pollution through BMPs (Best Management Practices).
  9. Reduce the amount of impervious coverage that contributes to flooding, adverse drainage conditions and the “urban heat island” effect.
  10. Discourage development in floodplains, flood hazard areas and disturbance of steep slopes and wetlands which contribute to flooding, adverse drainage conditions, stormwater run-off and non-point source pollution.
  11. Promote the use of green building design to reduce “greenhouse gas” emissions, reduce stormwater run-off and non-point source pollution, and the “urban heat island” effect.
- Waterfront Areas*
12. Encourage the construction of a continuous coordinated waterfront walkway along the County’s waterfronts.
  13. Encourage the development of marinas and ports, where appropriate.
  14. Integrate waterfront development with adjacent neighborhoods by assuring strong physical linkages and appropriate infill development and discourage gated communities that separate the remainder of the community from the waterfront.
  15. Create strong physical linkages between waterfront walkways and interior neighborhoods.
  16. Reduce the amount of impervious coverage, which contributes to stormwater run-off, non-point source pollution and combined sewer overflows.
- Industrial Areas*
17. Improve the developability of industrial areas through measures such as infrastructure and access improvements.
  18. Encourage and assist in the retention and expansion of existing industries in the County.
  19. Take advantage of possible niche opportunities in existing and emerging industries such as apparel, telecommunications, business services, food processing, import/export, third-party logistics, telecommunications, trucking

- and warehousing.
20. Establish industrial areas with sufficient access to transportation facilities.
  21. Encourage the development and expansion of industrial activities that use regional resources, labor skills and other local assets and advantages.
  22. Encourage the location of industrial sites near railroad and port facilities which utilize the movement of freight by rail and barge.
  23. Encourage industrial developments to utilize alternative transportation measures for the movement of employees and visitors.
  24. Reduce the amount of impervious coverage, which contributes to stormwater run-off and non-point source pollution.
  25. Encourage industrial sites to minimize impervious coverage and utilize green building technology to reduce "green house gas" emissions, stormwater run-off and non-point source pollution.
  26. Work with industry to ensure environmental conditions are improved particularly as the location of industry relates to neighborhoods downstream.

#### *Commercial Areas*

27. Establish local community-based organizations such as special improvement districts, neighborhood improvement districts and local development corporations to help revitalize neighborhood commercial and residential areas.
28. Encourage convention, cultural and entertainment activities within the core areas of the County to spur economic growth.
29. Encourage the grouping of compatible retail establishments into functional commercial centers to promote synergy among businesses.
30. Encourage municipalities to provide creative solutions to parking and loading issues.
31. Promote the viability of Downtown commercial districts by retaining first floor retail sales and services.
32. Encourage the development of complementary land uses in proximity to commercial areas.
33. Establish design and aesthetic controls in commercial areas to create and maintain attractive shopping areas.
34. Identify and create financial and technical assistance programs available to businesses from the County, State and Federal government.
35. Assist in the coordination of community revitalization projects that are multi-jurisdictional.
36. Encourage the location of commercial development near existing transit services and facilities.
37. Encourage commercial developments to utilize alternative transportation measures for the movement of employees and visitors.
38. Encourage commercial development to utilize alternative transportation measures like walking, bicycling, jitney shuttles and telecommuting.
39. Discourage the development of commercial sites in areas inaccessible by walking, bicycling, and mass transit.
40. Encourage commercial developments to minimize impervious coverage and utilize green building practices to reduce "green house gas" emissions and stormwater run-off.

### *Residential Areas*

41. Protect existing neighborhoods from incompatible development.
42. Discourage illegal additions of dwelling units to residential structures.
43. Promote home ownership to increase incentives for housing maintenance and improvements.
44. Encourage development at densities that support mass transit.
45. Encourage transit-oriented development near existing or proposed transit facilities.
46. Encourage compact development within walking distance of mixed-use centers.
47. Encourage traditional neighborhood design that is walkable and has strong linkages to the pedestrian circulation network.
48. Encourage residential developments to utilize pedestrian and bicycle facilities.
49. Encourage residential developments to minimize impervious coverage and utilize green building technology to reduce “green house gas” emissions and stormwater run-off.
50. Encourage residential developments to utilize green building practices to reduce “green house gas” emissions, stormwater run-off and non-point source pollution.
51. Analyze and monitor health and economic data to ensure health and access to employment opportunities are enhanced.

## 2002 & 2008 Issues

The County's major land development problems have been drawn from the 2002 Master Plan and 2008 Re-examination Report Land Use Elements.

### Future Development Patterns

**The Issue:** The 2002 Master Plan noted that the county should be wary not to create a glut of any one type of development as to survive an economic downturn. Another concern that the 2008 Re-examination Report noted was that the future development pattern in the county should be consistent and attractive. During that time, projects such as the Hudson Bergen Light Rail Transit (HBLRT) and development on the waterfront had the potential to dramatically change Hudson County's appearance. According to the 2008 Re-examination Report, *"the HBLRT will continue to play a key role in future land use decisions and development surrounding the 20 stations in Bayonne, Jersey City, Hoboken, Weehawken, and Union City."* With this new growth came further demands on roads, utilities, stormwater infrastructure, etc. that required upgrades.

**What Has Changed:** Mixed-use development has become the predominant development pattern through much of Hudson County, creating a mix of commercial/retail on the ground level with residential units on the higher floors. The style of development has emerged around rail stations, especially along the HBLRT, and revitalized neighborhoods with consistent and attractive development. Bayonne, Jersey City, and Union City all encourage Transit Oriented Development within their regulations, identifying allowable bulk or design standards. Amended in 2014, the zoning map for Bayonne includes a Transit Development District (TDD) in addition to the already existing Transit Development Overlay Zone (TDO). Jersey City references TOD sub-districts in its 2010 amendment for the Morris Canal Redevelopment Plan and does not include parking minimums for new development in the Journal Square 2060 Redevelopment Plan.

Union City includes the most extensive regulations for the land-use balance around light rail, by designating an Uptown Transit Oriented Development Overlay Zone (UTOD). According to the regulations, the overlay zone is an incentive tool for property owners to develop their properties using transit-oriented design principles while preserving the rights permitted by underlying district designations. Union City also preserves design compatibility in new development through its regulations, including the waterfront. Jersey City and Hoboken have waterfront districts, but neither have been updated to include urban design standards.

Many changes have occurred in the Harrison Redevelopment area since 2008 including the completion of the Red Bulls soccer stadium in 2010, a 1,440 space parking structure, several mixed-use commercial and residential projects, and new hotels. The area is also undergoing the demolition and cleanup of former contaminated industrial sites, construction of new waterfront walkways, and a \$256 million Harrison PATH station modernization project.

### Industrial Land Use

**The Issue:** By 2002, Hudson County's industrial sector was undergoing a change, with the national decline in manufacturing which was offset by an increase in wholesale trade, distribution and transportation-related uses. Higher land costs and clean-up costs of contaminated sites had industrial development limited to the reuse of older industrial buildings and new industrial development was limited to large-scale warehousing and distribution centers. The 2008 re-examination report identified 17 million square feet of potentially developable industrial space, which included vacant, industrially zoned land along the waterfront and obsolete underutilized buildings in the county's older industrial areas. However, conversion of industrial to commercial buildings was also becoming popular which decreased the potentially available space for industry. Overall, the amount of industrial land was declining as industries relocated to areas outside the county.

Table 6: County Industries

Industry by NAICS Code	2009		2014		% Change
	Total	Percent	Total	Percent	
Manufacturing	490	3.61%	383	2.79%	-.082%
Wholesale Trade	827	6.10%	675	4.92%	-1.18%
Transp/Warehousing	720	5.31%	715	5.21%	-0.09%
Private Sector Total for all Industries	13,568	97.32%	13,719	97.02%	-0.31%

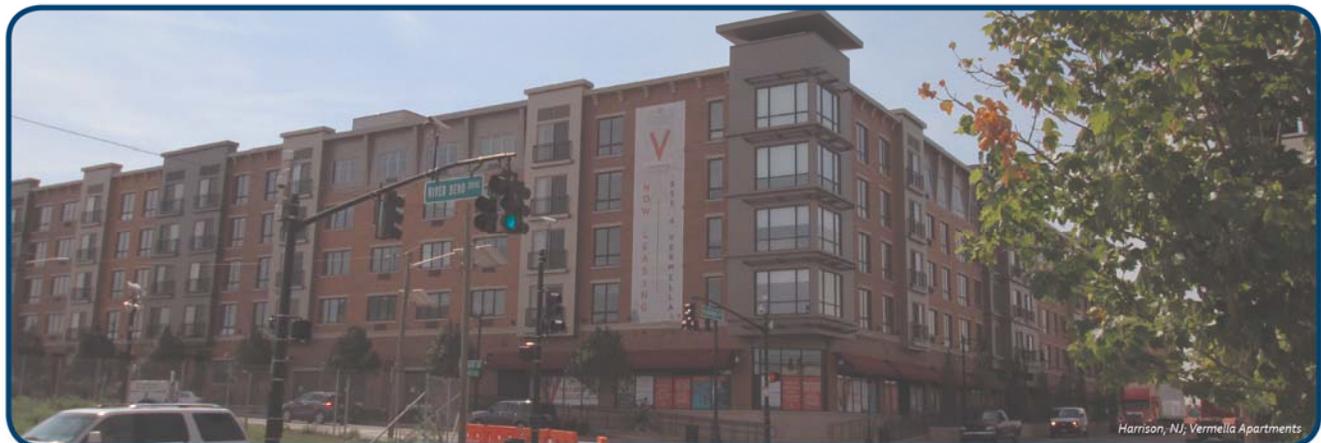
Source: NJ Department of Labor and Workforce Development, Employment and Wages, 2009 & 2014 Annual Report

**What Has Changed:** According to Hudson County tax records, there were 1,792 industrial properties (Class 4B) in Hudson County in 2008. In 2015 (most recent data available), there were 1,622<sup>17</sup>. Data from the NJ Department of Labor and Workforce Development, for 2009 and 2014 reveals the county has experienced a reduction in the number of manufacturing, wholesale trade, and transportation/warehousing establishments.

Although large industrial development has occurred in Hudson County such as the new state of the art and sustainable GOYA Foods building in Jersey City<sup>18</sup>, there has been a slight overall decrease in industrial uses. As the 2008 report discussed, manufacturing is declining while transportation and warehousing and distribution centers have become the more desirable use for industrial zones. As modern distribution facilities have become larger (upwards of one million square feet or more), they have located in areas of the region with more developable land such as

near NJ Turnpike’s Exit 8A and Pennsylvania’s Lehigh Valley. In 2010, the industrial Greenville Float Yards was bought by PANYNJ and was upgraded with a modernized barge to rail facility.

As the 2002 Master Plan points out, the overall decline of industry in Hudson County is part of a larger national trend of manufacturing leaving the United States for lower labor costs. While some discussion has centered around the return of manufacturing to the United States (reshoring) or Central/South America (near-shoring) to offset higher transportation costs and supply chain disruptions, it is also unlikely that these industries will return to northern New Jersey in favor of lower cost states. More information about industry in the county can be found in the 2016 CEDS.



## Port Growth

**The Issue:** While the 2002 Master Plan discusses the role of the ports in Hudson County, particularly the Global Container Terminal, the 2008 Re-examination Report raises the issue of projected growth of the ports due to increased cargo volumes. As of the 2008 report, cargo volumes were expected to double by 2010 and quadruple by 2040. While this cargo would be spread around the various terminals that made up the port complex also located in Essex and Union Counties and New York, there would be an expected increase at Global Container Terminal in Jersey City as well. Further, this port growth, which supported over 166,500 jobs and generated \$30 billion in economic activity, would result in competition for valuable land use along the waterfront. This was the case of the former Military Ocean Terminal (MOTBY), where Bayonne identified the land for mixed-use development, but the land the Port Authority of New York and New Jersey owned was to be used for expanded port facilities.

**What Has Changed:** Development at the ports continue to occur, driven by growth in global trade. Major infrastructure projects such as harbor deepening at the Global Marine Terminal have been completed. Other port infrastructure improvements include:

- Improved efficiency at Global Container Terminals in Bayonne
- Redevelopment of Greenville Yards to include ExpressRail<sup>19</sup>, gantry cranes, and rail to barge equipment
- Bayonne Bridge Navigational

## Clearance Project

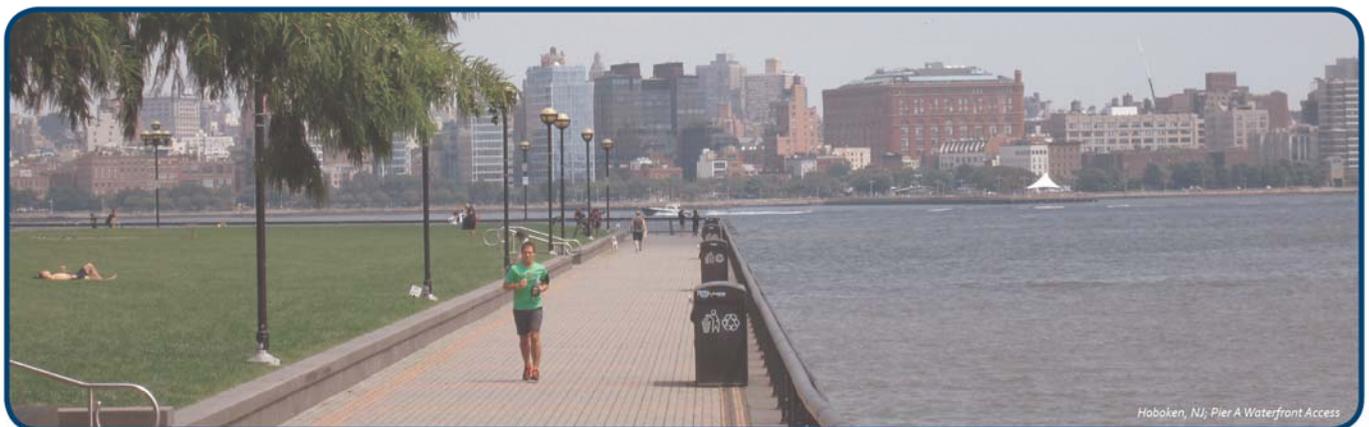
- Roadway Capital Plan from PANYNJ for an improved road network into Port Jersey



## Waterfront Access

**The Issue:** As development along the waterfront continued to occur, concerns of maintaining public waterfront access was raised. One of the additions to the 2002 Master Plan in the 2008 Re-examination Report was the inclusion of an objective to discourage gated communities along the waterfront because they separate the remainder of the community from the waterfront, destroying physical linkages to adjacent neighborhoods.

**What Has Changed:** Gated communities still exist along the County's waterfront, restricting public access. They include Port Liberte and Society Hill/ Droyer's Point in Jersey City, as well as Bulls Ferry and James Ferry in Guttenberg. Overall, however, public access to the waterfront has been improved via other means such as the funding of greenways and enhancements to Hudson County and municipal parks located along the water.



In December 2015, the NJ Appellate Court decision invalidated N.J.A.C. 7:7-9.48, the public trust rights rule, and N.J.A.C. 7:7-16.9, the public access rule, as well as any other provisions of the regulations that rely upon those two sections. The controversial public access rules were denied on the basis that DEP lacked legislative authorization under CAFRA to regulate and that the Public Trust doctrine does not authorize DEP regulation. These regulations intended to govern the Municipal Public Access Plan.

### Developed Versus Natural Land Use Balance

**The Issue:** While the 2002 Master Plan was published just as new development and redevelopment were starting to take root in Hudson County, the 2008 re-examination report was written in a time where residential and commercial development activity was in full swing. The 2008 plan noted that future development activity would include over 23,000 new housing units, 39.4 million square



feet, and 17.4 million square feet of industrial space. This development was to primarily occur in the environmentally sensitive Hackensack Meadowlands and the vulnerable Hudson River waterfront. As a result, new goals were developed in the 2008 Re-examination Report to discourage development on environmentally sensitive sites and to minimize the negative effects of development and redevelopment on the natural and built environments. The inclusion of both goals indicated a need to balance both the natural and the built environments in Hudson County.

**What Has Changed:** Between 2013 and 2015,

the Hudson County Planning Board approved various site plans that impacted steep slopes, fresh water wetlands, or floodplains. Of those approved, all applications involved sites that were already developed. Under County jurisdiction, no new developments have occurred in environmentally constrained areas. Further, the Capital Improvement Plan (CIP) examines the impact of major storm events on Hudson County's built environment such as development, critical infrastructure, and community facilities.



## 2008 Recommendations - Now

***"All applications reviewed by the County should also have a consistency review with the County Master Plan."***

Although the land development regulations state that "land development within the County proceeds in accordance with, and is consistent with, the goals and objectives of the Hudson County Master Plan and other adopted County plans," an official consistency review procedure is not required by the LDR.

***"Review and expand the definitions of drainage and add a definition of traffic circulation affecting County roads in the County Site Plan & Subdivision Ordinances. These definitions [Drainage and Circulation /Traffic] should consider the actual design and placement of buildings as well."***

The 2016 LDR update encourages Green Stormwater Infrastructure (GSI) techniques as sustainable stormwater solutions and have been integrated into the definition for drainage. The definition for drainage is defined as, "the removal of surface water or ground water from land by drains, grading, **green infrastructure** or other means. This includes control of runoff during and after construction or development to minimize erosion and sedimentation to assure the adequacy of existing and proposed culverts and bridges, to induce water recharge into the ground where practical, to lessen nonpoint pollution, to maintain the integrity of stream channels for their biological functions as well as for drainage, and the means necessary for water, supply preservation or prevention or alleviation of flooding." The new definition for circulation incorporates the recommendation from the 2008 Re-examination Report. Circulation is now defined as, "systems, structures and physical improvements for the movement of people, goods, water, air, sewage or power by such means as sidewalks, waterfront walkways, bikeways, streets, highways, railways, waterways, towers, airways, pipes and conduits, and the handling of people and

*goods by such means as activity centers, parks, terminals, stations, warehouses, and other storage buildings or transshipment points."*

***"Site design as it relates to circulation is important in creating strong relationships between buildings and the circulation network. These relationships can work to solidify a stable pedestrian circulation system and has also been critical in traffic calming measures as well. More discussion on traffic and circulation can be found in the Circulation Plan."***

To encourage bicycling as a viable transportation mode, Hudson County has continued to require bicycle infrastructure as part of the parking standards for development applications: "Bicycle parking racks shall be provided for multifamily, non-residential and mixed-use development projects. The racks shall accommodate bicycles at a ratio of one (1) bicycle space for every ten (10) vehicular parking spaces provided." In 2015, both Jersey City and Hoboken launched bike share systems. *The Hudson County Bike Share Feasibility Study* proposes expanding the system to other municipalities.

***"Work with NJTPA and individual municipalities to coordinate and educate public, planning, and zoning officials on maintaining and reestablishing strong urban design standards that incorporate reduced and shared parking requirements. Where appropriate, waivers from Residential Site Improvement Standards (RSIS) should be a permanent consideration, particularly in downtown and Transit Oriented Development (TOD) districts."***

Parking requirements are wholly under the purview of local planning and zoning boards, but there are a number of transportation demand management programs available to help offset the need for excessive parking. Hudson County TMA has set up a rideshare<sup>20</sup> program that allows drivers to find other drivers or passengers to start carpooling as well as a vanpooling system. Several park-and-ride lots exist throughout the county, which provide access to PATH, HBLRT, and NJ TRANSIT trains.

The General Conditions of the 2016 LDR update of the Circulation and Roadway Design Standards section states that, *"the applicant shall wherever possible consider implementation of ride-sharing programs, improved access to public transportation and bicycle share programs in order to minimize vehicular traffic impacts"* and *"opportunities for shared parking and other parking mitigation strategies should be considered."* One change of significance since 2008 pertaining to support programs is the large rise in ridesharing apps and services like Uber and Lyft.

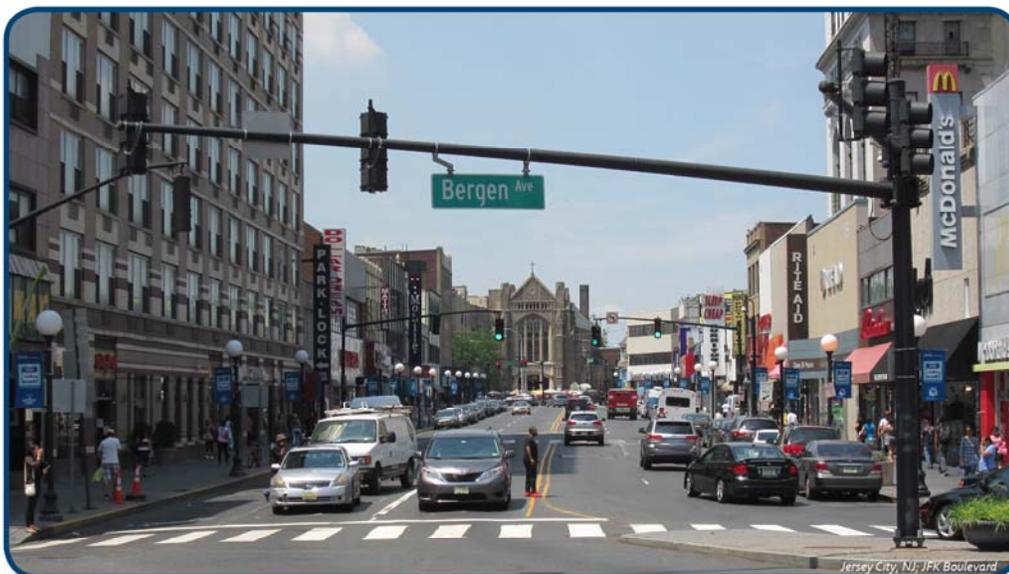
As discussed above, there are a number of programs that can be used to help offset the need for parking requirements in Hudson County. Additionally, ridesharing services such as Uber and Lyft can improve accessibility to transit, jobs, and other services without the need to own an automobile. This could potentially reduce the need for automobile ownership and could be a consideration in future parking requirements for new developments. The LDR states that county roadway design standards are intended to conform to RSIS, but that in instances of conflict, the RSIS shall take precedence unless the applicant obtains a waiver or a municipality is exempt. The regulations also state that where a municipality has adopted Special Area Standards for residential parking and those standards are approved by the State Site Improvement Authority Board, the municipal

Special Area Standards for parking shall apply. ***"All new development should be required to analyze its impact on public facilities and contribute toward the adequate provision thereof."***

The 2016 LDR states under Notification Prior to Developer Action of the Approval Conditions section, that *"a developer shall not take any action which would affect County facilities prior to a pre-construction meeting and the submission of a written construction schedule to the Office of the County Engineer, and shall obtain any permits and post any fees or bonds with County Planning Board or Engineer that shall be required."* Provisions for off-tract improvements including roadways and drainage facilities are included as a proportionate or pro rata cost of public facilities in the 2016 LDR update.

***"The County Site Plan and Subdivision Ordinances should also be reviewed for mechanisms that trigger additional County Planning Board Review of amendments to local approvals or projects."***

The County currently has a Jurisdictional Determination (JD) process in place to review changes to site plans approved at the local level, which may trigger County review.





Based on the above land use issues and the current state of land use trends in the county, the following goals and objectives have been established to overcome the county's land use threats and weaknesses as well as take advantage of its strengths and opportunities.

## 2016 Goals and Objectives

**Goal 1: To integrate land use planning with transportation of all modes, with a particular focus on pedestrian and bicycle accessibility and major activity hubs.**

- Objective a: Promote development intensities that are supportive of public transportation use.
- Objective b: Encourage the location of commercial and residential development, especially mixed-use, near existing or proposed transit corridors.
- Objective c: Develop better connections between land use activities and the transportation needs of Hudson County residents.
- Objective d: Encourage development and redevelopment that promotes the use of alternative transportation measures such as walking, bicycling and jitney shuttles.
- Objective e: Encourage development and redevelopment that utilizes transit friendly design practices that will capitalize on existing and planned transportation improvements, decrease traffic congestion, improve level-of-service and improve the movement of residents, employees and visitors.
- Objective f: Encourage municipalities to provide creative solutions to parking and loading issues.

**Goal 2: To maintain and improve areas that provide centers for employment, education, entertainment facilities, services, shopping and other resources.**

- Objective a: Encourage conventional, cultural and entertainment activities within the core areas of the county to spur economic growth.
- Objective b: Encourage the grouping of compatible retail establishments into functional commercial centers to promote synergy among businesses.

**Goal 3: To provide for a full range of retail businesses and personal services in suitable locations to serve the needs of the County.**

- Objective a: Assist in the coordination of community revitalization projects that are multi-jurisdictional.
- Objective b: Promote the viability of downtown commercial districts by retaining first floor retail sales and services.
- Objective c: Identify and promote county, state and federal government financial and technical assistance programs available to businesses.

**Goal 4: Encourage the planning and location of compatible development.**

- Objective a: Encourage the development of complementary land uses in proximity to commercial areas.
- Objective b: Work with industry to ensure conditions are protective of the health and welfare of the human and natural environments.
- Objective c: Promote environmental justice by improving conditions for communities disproportionately burdened by pollution and flooding.

**Goal 5: Preserve and enhance existing neighborhood character.**

- Objective a: Consider the established character of existing neighborhoods as a factor in the evaluation of new development and redevelopment projects.
- Objective b: Provide assistance to municipalities in the preparation of urban design standards for infill development to create “urban neighborhoods of place” that reflect the character of existing neighborhoods.
- Objective c: Encourage municipalities to consider design standards and aesthetic controls in commercial areas to create and maintain attractive shopping areas that create a sense of unity and order in the design of buildings, streets, sidewalks, shade trees, signage and other structures.
- Objective d: Establish design standards and building codes for new construction and rehabilitation projects that will protect structures against sea level rise.



**Goal 6: To encourage existing manufacturing and industrial uses to remain, modernize and expand and to encourage new manufacturing and industrial uses to locate in the County.**

- Objective a: Ensure industrial areas are developable through measures such as siting industry near railroad and port facilities that can utilize the movement of freight by rail and barge and through infrastructure improvements.
- Objective b: Take advantage of possible niche opportunities in existing and emerging industries such as finance and insurance, retail trade, health care and social assistance, transportation and warehousing, educational services, professional, scientific and technical services, accommodation and food services, and construction.
- Objective c: Encourage and assist in the retention and expansion of existing industries in the county.
- Objective d: Encourage the development and expansion of industrial activities that use regional resources, labor skills and other local assets and advantages.

**Goal 7: To promote the development of walkable communities fully linked and integrated with the pedestrian transportation grid.**

- Objective a: Encourage compact development within walking distance of mixed-use centers.
- Objective b: Encourage traditional neighborhood design that is walkable and has strong linkages to the pedestrian circulation network.
- Objective c: Encourage municipalities to create separate standards for unified streetscape improvements that improve pedestrian circulation in downtown areas as well as enhanced access to jobs.

**Goal 8: To assist in the implementation of the development, redevelopment and protection of the waterfronts of the Hudson, Passaic and Hackensack Rivers.**

- Objective a: Encourage the construction of a continuous coordinated waterfront walkway along the County's waterfronts.
- Objective b: Integrate waterfront development with adjacent/interior neighborhoods by assuring strong physical linkages and appropriate infill development and discourage gated communities that separate the remainder of the community from the waterfront.
- Objective c: Encourage the development of marinas and ports, where appropriate.

**Goal 9: To encourage redevelopment in areas in need of rehabilitation.**

- Objective a: Establish local community-based organizations such as special improvement districts, neighborhood improvement districts and local development corporations to help revitalize neighborhood commercial and residential areas.
- Objective b: Identify possible buildings or neighborhoods that have underutilized or vacant spaces that could be converted into space for creative businesses, performance spaces, or live/work rental facilities.
- Objective c: Support municipal redevelopment plans through County Planning Board review.
- Objective d: To encourage remediation and reuse of environmentally contaminated sites through brownfield redevelopment.

**Goal 10: To minimize the negative effects of development and redevelopment on the natural and built environments and to discourage development on environmentally sensitive areas.**

- Objective a: Discourage development in floodplains, flood hazard areas and disturbance of steep slopes and wetlands which contribute to flooding, adverse drainage conditions, stormwater run-off and non-point source pollution.
- Objective b: Reduce the amount of impervious land coverage in urban areas, which contributes to stormwater run-off, non-point source pollution, adverse drainage conditions, combined sewer overflows and the “urban heat island” affect.
- Objective c: Promote energy-efficient buildings and healthy communities through LEED-ND principles, trees, signage and other structures.
- Objective d: Establish design standards and building codes for new construction and rehabilitation projects that will protect structures against sea level rise.

## 2016 - New Issues

In addition to the issues identified in the 2002 and 2008 plans, the following issues have surfaced based on land use trends and community participation feedback.

### Land Use Resiliency

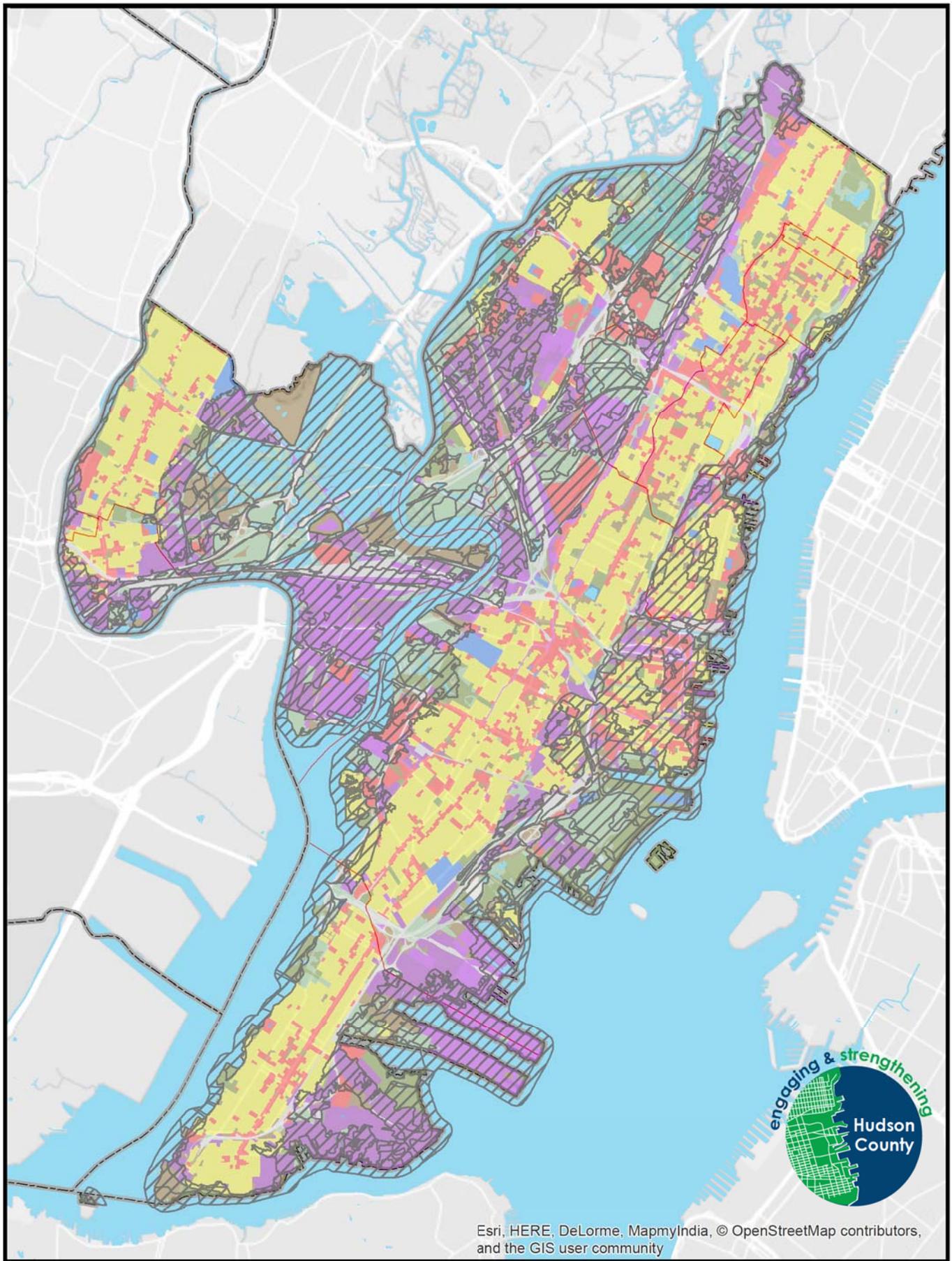
The thoughtful planning of land use through zoning regulations is a particularly important consideration with resiliency planning, especially in a highly-urbanized area like Hudson County. Large areas of the county are already located in flood hazard areas. As 80% of this land is developed<sup>21</sup>, severe weather events and even normal rainstorms may have a disruptive effect on daily lives. Further, new development typically increases the amount of impervious surface, which can lead to increased stormwater runoff and necessitate an increase in the base flood elevation (BFE).

Much of the county's developable land has been built out and redevelopment is becoming a common occurrence throughout many of Hudson County's municipalities. At the same time, there are opportunities to ensure that resiliency is part of the development process. The 2016 Land Development Regulations Update provides a number of recommended Green Stormwater Infrastructure techniques that must be used when a development is located along a county roadway or affects a county facility.

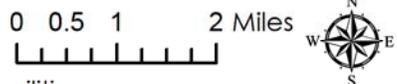
In addition to the county's LDR, Hoboken has developed a Green Infrastructure Strategic Plan that provides Best Management Practices (BMPs) for improvements depending on the city's sewershed. Funded through Together North Jersey's Local Demonstration Program, the plan also recommends the idea of using incentive zoning as a way for developers to incorporate green infrastructure on-site in exchange for greater density. Compact land use is particularly effective for resiliency planning because it can reduce the amount of impervious surface resulting from a building's footprint and parking, while providing space for green infrastructure. Jersey City's Sandy Recovery Strategic Planning Report from 2014

also noted that the city was planning to develop and codify zoning and flood damage protection ordinances for building rehabilitation and new construction. These requirements would provide approaches that are more resistant to future storm events and context sensitive to the character of Jersey City's neighborhoods. Other communities in Hudson County that may be affected by future storms are encouraged to explore and adopt similar requirements into their zoning code.

Other considerations to new development and redevelopment is requiring livable spaces in areas which are vulnerable to flood events to be constructed above FEMA's Advisory Base Flood Elevation (ABFE) to account for changes in sea levels and impacts of storms surges. FEMA and the NJDEP recommend municipalities adopt standards that go above the minimum requirements established by both agencies. A municipality which does establish more stringent building requirements not only positively impact the resiliency of structures developed in the floodplain but also provide an opportunity for property owners to see significantly reduced flood insurance premiums. Guidance related to building with flood-resistant materials can be incorporated into building codes to ensure that redevelopment and new construction can mitigate the damage from flooding and future storms. Where flood events are a frequent occurrence (there have been 15 separate flooding events in Hudson County between 2008 and 2014<sup>22</sup>) that lead to repetitive loss or severe repetitive loss, flood buyouts, funded through programs such as Blue Acres or FEMA's Flood Mitigation Grant Program, may be considered to prevent further damage and allow the land to return to a natural state and provide additional buffering from flooding.



**Existing Land Use (2012-Updated 2015) and the 100-Year Floodplain (2013/15 Preliminary FIRM)**



- |             |                               |                                     |
|-------------|-------------------------------|-------------------------------------|
| Residential | Industrial                    | Public-Institutional Use/Facilities |
| Commercial  | Open Space/Marsh Wooded Areas | Mixed Urban-Developed Land          |
|             | Recreation                    | 100-Year Floodplain (A and V Zones) |

## Healthy Communities

An important discussion taking place today is the connection between land use and personal health. Land use planning is especially critical because zoning has a particular impact on the accessibility to places that support healthy living. The ability for a resident to have safe and convenient access to healthy food options or parks and facilities for active recreation can help lower the risks of obesity, diabetes, heart disease, and other diseases. Policies and decisions that lead to a separation of land uses exacerbate the divide between residents and the services (i.e. supermarkets and parks) they need to lead a healthy and active lifestyle. This is further enforced when these uses are only generally accessible via automobile, or are not well-integrated into the fabric of the community. Encouraging mixed-use development or using innovative land-use planning techniques that facilitate a mix of uses such as form-based codes can assist in bridging that gap. In addition, infrastructure like sidewalks, bicycle facilities, and universal design recreational spaces promote healthy activity. Programs can include farmer's markets, allowances and support for community gardens on empty lots, and educational programs that support healthy living.

The USDA publishes a Food Access Research Atlas (last updated in June 2016) which describes food access using at least one of several indicators including: accessibility to sources of healthy food as measured by distance to a store and number of stores in the area; individual-level resources such as family income or vehicle availability; and neighborhood-level resources such as average income of the neighborhood or availability of public transit. For Hudson County, the Atlas indicates that there are pockets of low income census tracts where a significant number of the share of residents



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Table 7: Land Use Recommendation Checklist

#	Recommendation	Status
LU-1	Identify areas in the county where access to healthy food is limited and encourage zoning that incentivizes the construction of a food market.	
LU-2	Identify areas in the county where access to health care facilities is limited and promote programs that improve access to health care.	
LU-3	Conduct Health Impact Assessments (HIA) for projects or programs that may affect environmental justice communities.	
LU-4	Encourage the preservation and redevelopment of vacant industrial sites into port-related uses, where available. Encourage and assist in the retention and expansion of existing industries in the county.	
LU-5	Partner with the county’s leading corporations, business leaders, and institutions to establish and support non-profit downtown development corporations to assist businesses and program events.	
LU-6	Promote a street-level small businesses Vibrancy Program to activate sidewalks, attract prospect businesses, and catalyze public spaces.	
LU-7	Assist communities in developing Vision Plans for design standards and aesthetic guidelines in commercial areas.	
LU-8	<b>Encourage municipalities to incentivize green stormwater solutions through strategies such as performance zoning that would allow greater densities in exchange for implementing BMPs on-site.</b>	
LU-9	Provide additional resources for applicants to determine municipal, County, and NJSEA jurisdiction.	
LU-10	<b>Encourage zoning and land uses that are compatible with flood zone designations and regulations.</b>	
LU-11	<b>Encourage municipalities to incentivize environmentally friendly development through LEED guidelines and green building codes.</b>	
LU-12	Encourage municipalities to change the zoning that would allow for the creation of shared co-working spaces and small business incubators around college centers and universities.	
LU-13	Identify brownfield sites that are well-positioned for redevelopment and work with local municipalities to explore programs to facilitate their cleanup.	
LU-14	Promote increased density and transit-oriented development around key transportation hubs such as Secaucus Junction, Journal Square, and stations along the HBLRT.	
LU-15	Promote the use of conservation easements for new developments in areas identified for greenways.	
LU-16	Support municipal redevelopment plans and efforts that are in line with the County’s Master Plan, such as through Hudson County Planning Board review of application and County policy initiatives.	
LU-17	Advocate for the development of a new State Development and Redevelopment Plan.	
LU-18	Support the creation of specialty entertainment and retail districts.	
LU-19	Identify areas of concentrated criminal activity and develop a pilot Crime Prevention Through Environmental Design (CPTED) study that can be used by municipalities for implementation.	